

AMENDMENTS TO THE CLAIMS

Listing of Claims

1 - 7. (Canceled)

8. (New) A transmitter, comprising:

a sensor, which serves for registering a physical parameter (X) and transducing such into an electrical quantity;

a signal pre-processor connected to said sensor, which serves for converting the electrical quantity into a raw signal (R);

a signal processor connected to said signal pre-processor, which serves for converting the raw signal (R) into a measurement signal (M);

an output stage, which serves for issuing an output signal corresponding to the measurement signal (M); and

a monitoring unit connected to said signal pre-processor, to said signal processor, and to said output stage which in operation compares the output signal with an auxiliary signal (H) derived from the raw signal (R) and triggers a safety-directed adjustment of the output signal, when a difference between the output signal and the auxiliary signal (H) exceeds a predetermined limit.

9. (New) The transmitter as claimed in claim 8, wherein:

said output stage issues an analog output signal, which is taken across a resistor, which is fed to said monitoring unit, and which is registered in said monitoring unit by means of a measuring circuit.

10. (New) The transmitter as claimed in claim 8, further comprising:

an electronic unit, which serves for processing the fed measurement signal (M) according to an application-specific transfer function (F).

11. (New) The transmitter as claimed in claim 8, wherein:
an adjustment of a zero-point and a scaling of the measurement signal (M) is accomplished by the application-specific transfer function (F).

12. (New) The transmitter as claimed in claim 10, wherein:
said monitoring unit includes a second electronic unit,
the transfer function (F) is stored in a memory assigned to said second electronic unit, and
said second electronic unit in operation derives the auxiliary signal (H) from the raw signal (R) by processing the raw signal (R) according to the application-specific transfer function (F), and compares the auxiliary signal (H) with the output signal.

13. (New) The transmitter as claimed in claim 8, wherein:
the safety-directed adjustment of the output signal is an alarm signal.

14. (New) A method for start-up of a transmitter, comprising the steps of:
feeding the transfer function (F) of the user to a first electronic unit via a communication interface, or a transfer function (F) present in the transmitter;
transmitting the transfer function (F) via a data line from the first electronic unit to a second electronic unit; and
storing said transfer function (F) in a memory assigned to the second electronic unit.